



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,442	09/11/2003	Rainer Albert	31625B	4891

1095 7590 03/09/2006

NOVARTIS
CORPORATE INTELLECTUAL PROPERTY
ONE HEALTH PLAZA 104/3
EAST HANOVER, NJ 07936-1080

EXAMINER

ANDERSON, REBECCA L

ART UNIT PAPER NUMBER

1626

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/660,442	ALBERT ET AL.	
	Examiner	Art Unit	
	Rebecca L. Anderson	1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7,9 and 11 is/are pending in the application.
- 4a) Of the above claim(s) 5,7 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 9 is/are rejected.
- 7) ☒ Claim(s) 1-4 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>23 Oct 2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-5, 7, 9 and 11 are currently pending in the instant application. Claims 5, 7 and 11 are withdrawn from consideration as being for non-elected subject matter. Claims 1-4 and 9 are objected and rejected.

Applicants' amendment filed 28 November 2005 in response to the notice of non-compliant amendment, is considered a compliant amendment under 37 CFR 1.121.

Election/Restrictions

Applicant's election without traverse of Group 1, claims 1-5 and 9 and the further election with traverse of the compound of example 1, in the reply filed on 5 August 2005 is acknowledged. The traversal is on the ground(s) that an election of species should be a provisional requirement according the MPEP 803.02. This argument is not found persuasive because the requirement to elect a specific compound was a further restriction requirement. The restriction requirement is made under 35 U.S.C. 121. 35 U.S.C. 121 gives the Commissioner (Director) the authority to limit the examination of an application where two or more independent and distinct inventions are claimed to only one invention. The examiner has indicated that more than one independent and distinct invention is claimed in this application and has restricted (limited) claimed subject matter accordingly. Thus the requirement to restrict the claims in this application is predicated on the fact that the claimed subject matter involves more than one independent and distinct invention. Nowhere do applicants argue to the contrary. Nowhere do applicants point out and give reasons why the claims do not involve independent or distinct subject matter. So, here we have claims, which involve more

Art Unit: 1626

than one independent or distinct invention. Under 35 U.S.C. 121, the claims may be restricted and the examination limited to a restricted invention. Accordingly, restriction as has been presented in this application is proper.

Therefore, as stated on page 4 of the restriction requirement, **the elected invention for search and examination is:** the products of the formula I as found in claim 1 wherein;

Ra, Rb, X, R18, Rc, Rx, Ry, R2, R3, R5 and R6 are as found in claim 1;

R is a radical of formula (a), (b) or (c);

R1, R4 and R7 is OH, SH, NR16R17, or a radical of formula $-X-Rc-Y$;

R16 and R17, independently, is H or C1-4alkyl;

Y is bound to the terminal carbon atom and is selected from OH and $-NR19R20$;

R19 and R20 independently is H, C3-6cycloalkyl, C3-6cycloalkyl-C1-4alkyl, aryl-

C1-4alkyl or C1-4alkyl optionally substituted on the terminal carbon atom by OH;

and **ring A** is optionally substituted, or a salt thereof.

The remaining subject matter of claims 1-4 and 9 that is not drawn to the above elected invention and the subject matter of claims 5, 7 and 11 stands withdrawn under 37 CFR 1.142(b) as being for non-elected subject matter. The remaining products which are not within the elected invention, which are independent and distinct from the elected invention and do not have unity with the elected product and are therefore withdrawn by means of a restriction requirement within the claims are, for example, the products wherein R is a radical of formula (e) or (f); R1, R4, R7, R11 and R14 are a heterocyclic residue; R16 and R17 form together with the nitrogen atom to which they

Art Unit: 1626

are bound a heterocyclic residue; Y is a heterocyclic residue; R19 and R20 form together with the nitrogen atom to which they are bound a heterocyclic residue; E is $-N=$ and G is $-C=$.

The above mentioned withdrawn products which are withdrawn from consideration as being for nonelected subject matter differ materially in structure and composition from the products of the elected invention. The withdrawn products contain differ from those of the elected invention, such as by quinazolinyl, isoquinolinyl, piperazinyl, pyrimidinyl, quinolinyl, morpholinyl, etc. which are chemically recognized to differ in structure and function. This recognized chemical diversity of the products can be seen by the various classification of these products in the U.S. classification system, i.e. class 544 subclass (283)+ quinazolinyl, class 546 subclass (139)+ isoquinolinyl, class 544 subclass (358)+ piperazinyl, class 546 subclass (134)+ quinolinyl, etc. Therefore, again, the products which are withdrawn from consideration as being for non-elected subject matter differ materially in structure and composition and have been restricted properly as a reference which anticipated but the elected subject matter would not even render obvious the non-elected subject matter.

These withdrawn products are independent and distinct from the elected invention and do not have unity with the compound elected and are therefore withdrawn by means of a restriction requirement within the claims.

The requirement is still deemed proper.

Claim Objections

Claims 1-4 and 9 are objected to as containing non-elected subject matter.

Claims 1-4 and 9 presented drawn solely to the elected invention for search and examination identified supra would overcome this objection.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 9 are rejected under 35 USC 102(b) as being anticipated by Davis et al. (reference AB, page 2 of 1449). Davis et al. discloses 2,3-bisarylmaleimides, such as the compound no. 69 (table V, page 180) which corresponds to applicants' instant elected invention of claims 1-4 and 9 wherein R is a radical of formula (a); R₂ and R₃ are hydrogen; R₁ is NR₁₆R₁₇ wherein R₁₆ and R₁₇ are each hydrogen; R_a is methyl, R_b is hydrogen; and A is unsubstituted. The pharmaceutical composition of claim 9 is anticipated by Davis et al. by, for example, the compound no. 67 which has an IC₅₀ does of 3.2 +/- 0.3 uM and was assayed for inhibition of rat brain protein kinase C with ATP and histone as substrates (page 179). Stock solutions of inhibitors were prepared in DMSO and assays were performed in 10% aqueous DMSO to ensure solubility of inhibitors (page 184).

[Note: while claims 2-4 provide further limitation to the heterocyclic residue of R₁, R₄, R₇, R₁₁, R₁₄, Y, NR₁₆R₁₇ or NR₁₉R₂₀, these claims do not limit these variables to only the heterocyclic residue, for example, R₁ in dependent claims 2-4 can be OH; SH; the specific heterocyclic residue as found in claims 2-4; NR₁₆R₁₇; or a radical of the formula -X-R_c-Y.]

Art Unit: 1626

Claims 1-4 and 9 are rejected under 35 USC 102(b) as being anticipated by Davis et al. (reference AA, page 1 of 1449, US Patent No. 5,057,614). Davis et al. discloses substituted pyrroles and their medicaments containing said compounds (columns 1 and 2). Pharmaceutical compositions are taught in example 102, column 35. Example 41, column 23, discloses the compound of the formula 3-(3-aminophenyl)-4-(1-methyl-3-indolyl)-1H-pyrrole-2,5-dione which corresponds to applicants' instant invention of claims 1-4 and 9 wherein R is a radical of formula (a); R₂ and R₃ are hydrogen; R₁ is NR₁₆R₁₇ wherein R₁₆ and R₁₇ are each hydrogen; R_a is methyl, R_b is hydrogen; and A is unsubstituted.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Gong et al., US Patent No. 6,478,490. Gong et al. discloses 3-indolyl-4-phenyl-1-H-pyrrole-2,5-dione compounds and pharmaceutical compositions (column 1). Pharmaceutical compositions are taught on column 24. Example 5 discloses the compound of 3-(1-methylindol-3-yl)-4-[3-(3-aminopropoxy)phenyl]-1H-pyrrole-2,5-dione (column 32) which corresponds to applicants' instant invention wherein R is a radical of formula (a), R₂ and R₃ are hydrogen, R₁ is a radical of formula -X-R_c-Y wherein X is oxygen, R_c is C₁-4alkylene and Y is bound to the terminal carbon and is -NR₁₉R₂₀ wherein R₁₉ and R₂₀ are hydrogen; R_b is hydrogen, R_a is C₁-4alkyl and A is unsubstituted. Example 6 (column 33) discloses the compound of 3-(1-methylindol-3-

Art Unit: 1626

yl)-4-[3-(2-aminoethoxy)phenyl]-1H-pyrrole-2,5-dione which corresponds to applicants' instant invention wherein R is a radical of formula (a), R₂ and R₃ are hydrogen, R₁ is a radical of formula -X-R_c-Y wherein X is oxygen, R_c is C₁-4alkylene and Y is bound to the terminal carbon and is -NR₁₉R₂₀ wherein R₁₉ and R₂₀ are hydrogen; R_b is hydrogen, R_a is C₁-4alkyl and A is unsubstituted. Example 34 discloses the compound 3-(1-methylindol-3-yl)-5-(3-aminophenyl)-1H-pyrrole-2,5-dione which corresponds to applicants instant invention wherein R is a radical of formula (a); R₂ and R₃ are hydrogen; R₁ is NR₁₆R₁₇ wherein R₁₆ and R₁₇ are each hydrogen; R_a is methyl, R_b is hydrogen; and A is unsubstituted. Other examples discloses are II-1 and II-2 (column 9), III-2 (column 11) which corresponds to applicants' instant invention wherein A is substituted. Example 17 also discloses the compounds 3-(1-methyl-5-fluoroindol-3-yl)-4-(3-aminophenyl)-1H-pyrrole-2,5-dione and 3-(1-methyl-5-chloroindol-3-yl)-4-(3-aminophenyl)-1H-pyrrole-2,5-dione which correspond to applicants' instant invention wherein A is substituted.

Conclusion

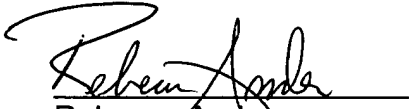
Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Rebecca L. Anderson whose telephone number is (571) 272-0696. Mrs. Anderson can normally be reached Monday through Friday 5:30AM to 2:00PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Mr. Joseph K. McKane, can be reached at (571) 272-0699.

Art Unit: 1626

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Rebecca Anderson
Patent Examiner
Art Unit 1626, Group 1620
Technology Center 1600

February 27, 2006